

# Audio-power

*by Loïc Bertrand*

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**Music naturally conveys emotion but, over the course of the 20th century, it has also become a tool of manipulation and perhaps even a weapon of control. Juliette Volcler describes this process in her book devoted to the career and research of little-known sound engineer Harold Burris-Meyer.**

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*Reviewed: Juliette Volcler, [Contrôle. Comment s'inventa l'art de la manipulation sonore](#) (Paris: La découverte, 2017), 158 p.*

Juliette Volcler, an independent scholar and editorial coordinator for the journal *Syntone* dedicated to sound, has published a fascinating book entitled *Contrôle. Comment s'inventa l'art de la manipulation sonore* [Control. The Invention of the Art of Sound Manipulation]. The book follows on from her earlier work, *Le son comme arme. Les usages policiers et militaires du son* [Sound as a Weapon. Police and Military Uses of Sound], which was published in the same collection and offered a genealogy of acoustic repression. *Contrôle* seeks to broaden the perspective to include other fields, namely industry and art. The collection 'Culture Sonore' [Sound Culture] published by La Découverte in collaboration with the Cité de la musique/Philharmonie de Paris, comprises studies that take a transdisciplinary approach to sound as a specific topic. The editorial line seems largely inspired by the field of 'Sound Studies', a multi-disciplinary area that studies sound in its various expressions. A translation of one of the key texts in this field, Jonathan Sterne's book *The Audible Past. Cultural Origins of Sound Reproduction*, has recently been published in this collection too (title: *Pour une histoire de la modernité sonore*).

Juliette Volcler's book focuses on one key figure: Harold Burris-Meyer (1902-1984), a little-known sound engineer who, nevertheless, according to the author, is the very embodiment of modernity in sound. Juliette Volcler makes no bones about claiming in her foreword that:

Harold Burris-Meyer was 20th century sound. He was its technician and its visionary, its magician and its marketing man, its warrior and its diplomat (p. 7).

This character is the guiding thread leading the reader through the century, offering a panorama of the first experiments conducted to analyse and measure the influence of sound on behaviour. The author focuses on the 'industrial phase of control', 'the point at which the technology, driven by the capitalist system, was transformed into a tool of domination to shape a relationship to the world that, still today, prevails in Western countries' (p. 9). This genealogy of sound control addresses three areas: theatre, industry, and war. The book's value resides both in its central character, Burris-Meyer, and in the way it draws together these different fields.

## Theatre as a Laboratory for Sound

It all started in the theatre. Burris-Meyer worked in stage direction and was particularly interested in the role of sound in theatre. As radio entered every home and films began to 'talk', Burris-Meyer deplored that, in the theatre, sound was not receiving due attention. In 1930, he introduced an initial dramatic innovation. For the 50-year anniversary of the American Society of Mechanical Engineers, the Stevens Institute, a private university specialising in mechanical engineering, was tasked with staging a historical pageant depicting technical progress, under the evocative title *Control*. For this occasion, Burris-Meyer broadcasted orchestra music over loudspeakers, something that had never been done in the theatre before. And he realised that sound had a direct influence on the audience, both on their corporeal attitudes and their inner state (p. 22).

This simple observation would determine everything to follow: whether through sonic realism or acoustic illusion, new techniques made it possible to manipulate people and their emotions, reactions, and behaviour. Burris-Meyer went on to contribute to developing the 'Stevens Sound Control System', completed in 1940: the system could produce a stereophonic mix of 6 audio sources and broadcast the result through 8 speakers, thereby faithfully reproducing the impression of acoustic sources and playing on movement effects. In his work controlling the sound spectrum, the distance, direction, movement, and momentum of sound, synthetic voices, infrasound, or reverberation, or with the invention of Surround Sound, Burris-Meyers was always driven by the same conviction: sound was an efficient means through which to produce an appropriate response. Electronic tools allowed artists to do what whatever they want with sound or with the listener. Simple processes could be used to manipulate the audience, for example recording applause when they clapped, inciting them to make more effort during an ovation. For Burris-Meyer, the theatre was the best possible research laboratory for sound manipulation.

## Muzak and Sound Design

Juliette Volcler outlines a genealogy of sound design in which audio products employing artistic methods were used to meet industrial objectives. Logically, therefore, the second part of the book focuses on industry. Burriss-Meyer combined these two areas, which are often opposed, in the same perspective, with efficiency and profitability as their central vanishing point. Art ceased to be an aim in and of itself, Juliette Volcler contends, and became instead a consumer product. In this second section of her book, the author gives particular emphasis to retracing the history of Muzak. Burriss-Meyer's collaboration with this company began early on and he went on to be its vice-president between 1943 and 1947. Muzak's focus was on creating background sound for public or private institutions: music designed to be heard and not listened to, Volcler explains. Their work focused both on audio content—devoid of speech, notably—and on sequences and how to string them together depending on target clientele or public.

With Muzak, behaviourism and marketing entered the musical sphere, argues Juliette Volcler. Aimed at improving employees' well-being or consumers' disposition to buy things, background music became a tool used to shape behaviour. However, from a very early stage, Muzak also invested in the industrial sector, offering music to set the tempo for workers' labour. Juliette Volcler reminds us that British factories were equipped with loudspeakers from 1940 and that the BBC provided a programme called 'Music While You Work' aimed at improving production. In Juliette Volcler's view, this was nothing less than disciplinary music, allowing both emotion and time to be controlled, making it seem as though work were easier and went by faster, sustaining workers as their resolve waned or calming them down when they were overexcited. The term 'disciplinary' is particularly apt in light of the fact that comparable techniques were implemented for treatment purposes in psychiatric hospitals, also by Muzak.

## War

These techniques of control through sound also found their place in the context of the war: music was used to stimulate war production just as it served to restore the men returned from the front. War is the third section in *Contrôle* and the book's culminating point. Juliette Volcler reminds us that the technologies tested in the theatre and the system of sound control developed in industry were requisitioned—machines and designers alike—by the American army in 1941 as part of the war effort, with a view to building new weapons and devising new tactics. We therefore see Burriss-Meyer don a uniform and consider how sound could be used to detect, disconcert, trouble, frighten, or derange the enemy. As well as the creation of the most intense audio sources ever designed, the author also describes various experiments

conducted around the idea of sound decoys, with a view to producing and broadcasting the noise of a ghost army to trick the enemy.

This section is particularly interesting and highly topical. It shows that sound, when broached as matter, can be used as a means directly to affect individuals through its physical effects: whether unbearable or inaudible, sounds affect our mental processes, our behaviour, and our inner equilibrium. Sound is particularly relevant as a weapon with the emergence of non-lethal weapons, which do not aim to kill people but rather to modify their behaviour. Juliette Volcler's approach seems broadly inspired by Michel Foucault's biopolitics, where power is no longer exercised over territories but over individual bodies instead.

Juliette Volcler's book is informative and stimulating. Written like a story, it makes for an easy read. The disadvantage to this, however, is that it has a tendency sometimes to oversimplify. The portrait painted of Burriss-Meyer at times feels like a caricature: self-interested and apolitical, he plays his role at the service of big business.

Several of the book's claims are also highly debatable. For example, the contention that, in 1930, theatre was still in advance compared to cinema when it came to staging sound, despite the fact theatre in fact borrowed its recording techniques from cinema. Similarly, the idea that in Walt Disney's first talking film *Steamboat Willie*, in 1928, 'the entire narrative was transformed by and revolved around sound' (p. 26). Of course, sound did transform the narrative but it cannot be seen as the heart of that narrative as it also illustrated the images. In her foreword, the author claims to study 'sound in and of itself' because she considers it as a topic in its own right rather than simply as the backdrop to speech. Nevertheless, whether in the cinema or in the theatre—and despite the fact Burriss-Meyer found himself dreaming of an autonomous art of sound, free from the visual—sound always enhances or conjures up an image, even when it is used to create a decoy. From this point of view, theatre clearly lagged behind cinema, which had already desynchronised audio and image in order to rethink sound separately. Throughout Juliette Volcler's book, sound only has meaning insofar as it reproduces a reality, albeit a fictional one. In this sense, one might ask whether she really does broach sound 'in and of itself'.

On another level, sound as a weapon is presented as an invention of late capitalism; Steve Goodman's book *Sonic Warfare*<sup>1</sup> reminds us, however, that there is a long history of sound being used to military ends.

Similarly, when it comes to controlling emotions, one might ask whether the aim even of classical music is not precisely to affect the audience directly, to draw upon and play upon emotion, to control the masses? This begs a series of further questions, which the author does not really address: where exactly is the dividing line between the use of sound analysed in the book and more classic uses of sound? Is an orchestra not already a marching army and a symphony a weapon of mass destruction?

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<sup>1</sup> Steve Goodman, *Sonic Warfare, Sound, Affect, and the Ecology of Fear*, MIT Press, 2012.

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